

Clinical Edit Criteria

Medical Procedure CT or MRI Chest
Class:
Date: July 17, 2006
Prepared for:
Prepared by: Missouri Medicaid

☒ New Criteria

☐ Revision of Existing Criteria

Executive Summary

Purpose: Encourage more appropriate utilization and resource management of costly diagnostic imaging studies, in this case computerized tomography and magnetic resonance imaging of the chest.

**Why was this
Issue
Selected:**

An analysis of Missouri Medicaid claims data has identified imaging of the chest and magnetic resonance imaging as two of the most highly utilized diagnostic imaging exams performed. The results of utilization management programs have suggested that a meaningful percentage of such exams are ordered inappropriately due to any of the following:

- The absence of appropriate clinical indications, e.g. established diagnoses or signs and symptoms
- The absence of initial and appropriate screening exams, e.g. prior Chest X-ray
- Layering and redundancy of prior and recent definitive exams, CT, MRI or otherwise

**Procedures
subject to
Pre-
Certification**

- 71250 Computed tomography, thorax; without contrast material
- 71260 Computed tomography, thorax; with contrast material(s)
- 71270 Computed tomography, thorax; without contrast material, followed by contrast material(s) and further sections
- 71275 Computed tomographic angiography, chest, without contrast material(s), followed by contrast material(s) and further sections, including image post-processing
- 71550 Magnetic resonance (eg, proton) imaging, chest; without contrast material(s)
- 71551 Magnetic resonance (eg, proton) imaging, chest; with contrast material(s)
- 71552 Magnetic resonance (eg, proton) imaging, chest; without contrast material(s)

followed by contrast material(s) and further sequences

71555 Magnetic resonance angiography, chest (excluding myocardium) with or without contrast material(s)

Setting & Population: All patients.

Type of Criteria: ☐ Increased risk of ADE ☐ Non-Preferred Agent
☒ Appropriate Indications ☐

Data Sources: ☐ Only administrative databases ☒ Databases + Prescriber-supplied

Setting & Population

- Procedure Group for review: Computed Tomography or Magnetic Resonance Imaging Chest
- Age range: All patients

Approval Criteria

- Diagnosis of Pneumonia with > 4 weeks of antibiotic therapy
- Pulmonary Embolus, Hemoptysis or Superior Vena Cava Syndrome without history of CT or MRI Chest in previous 6 weeks
- Diagnosis of Suspected or known tumor
- Documented Lung Screening
- Documented Calcium scoring of heart
- Emergency/Trauma claims will not require above criteria

Denial Criteria

- History of CT or MRI Scan of chest in previous 15 days
- Absence of Chest X-Ray in previous 30 days
- Absence of Antibiotic therapy with diagnosis of Pneumonia
- Previous CT or MRI Scan of chest with diagnosis of Pulmonary Embolus, Hemoptysis or Superior Vena Cava Syndrome
- Absence of Tumor and no history of Lung Cancer Screening or Calcium scoring of heart



References

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- 3) Paranjpe DV, Bergin CJ. Spiral CT of the lungs: optimal technique and resolution compared with conventional CT. AJR 1994; 162:561-567.
- 4) Park CS, Muller NL, Worthy SA, et al. Airway obstruction in asthmatic and healthy individuals: inspiratory and expiratory thin-section CT findings. Radiology 1997; 203:361-367.
- 5) Remy-Jardin M, Remy J, Gosselin B, et al. Lung parenchymal changes secondary to cigarette smoking: pathologic CT correlations. Radiology 1993; 186:643-651.
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